

(12) **UK Patent Application** (19) **GB** (11) **2 298 878** (13) **A**

(43) Date of A Publication 18.09.1996

(21) Application No 9505097.7

(22) Date of Filing 14.03.1995

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(51) INT CL<sup>6</sup>  
**E03D 9/03**

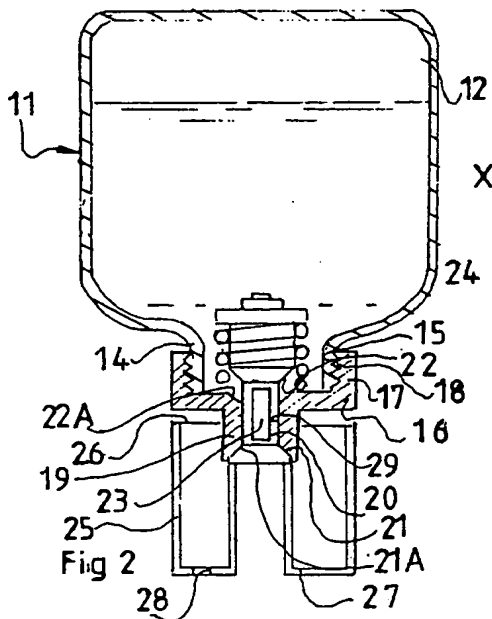
(52) UK CL (Edition O )  
**E1C C22B3 C22B4**  
**B8N NKA**

(56) Documents Cited  
**GB 2195368 A GB 2182958 A GB 2167041 A**  
**EP 0141687 A US 4429809 A US 3019451 A**

(58) Field of Search  
UK CL (Edition O ) **E1C C22B3**  
INT CL<sup>6</sup> **E03D 9/03**

(54) **Dispensing unit for a toilet cistern**

(57) A dispensing unit 11 for a cistern subject to periodic flushing includes: an outlet from the unit through which material to be dispensed is supplied; a reservoir 12 of material to be dispensed in discrete doses; and a dispensing shuttle 20 which acts to dispense a predetermined measure of material from the reservoir to the outlet each time a flushing action occurs. Typically the dispensing shuttle contains a chamber 23 corresponding in volume to the predetermined measure and is displaceable between a first position wherein it is in communication with the reservoir and isolated from the outlet, and a second position where the chamber is isolated from the reservoir and communicates with the outlet. Preferably the shuttle is connected to a container which has been filled, in whole or in part, by water supplied from the cistern but is not immersed in water in the cistern acts to draw the shuttle from the first to the second position to enable material in the chamber to flow into the container; the container containing a bleed means whereby liquid in the container can pass out of the container into the cistern.



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## CLAIMS

- 1 A dispensing unit for a cistern subject to periodic flushing including:  
an outlet from the unit through which material to be dispensed is supplied;  
a reservoir of material to be dispensed in discrete doses; and  
a dispensing shuttle which acts to dispense a predetermined measure of material from the reservoir to the outlet each time a flushing action occurs
- 2 A dispensing unit as claimed in Claim 1 wherein the dispensing shuttle contains a chamber corresponding in volume to the predetermined measure and is displaceable between a first position wherein it is in communication with the reservoir and isolated from the outlet, and a second position where the chamber is isolated from the reservoir and communicates with the outlet.
- 3 A dispensing unit as claimed in Claim 2 wherein the shuttle is connected to a container which has been filled, in whole or in part, by water supplied from the cistern but is not immersed in water in the cistern acts to draw the shuttle from the first to the second position to enable material in the chamber to flow into the container; the container containing a bleed means whereby liquid in the container can pass out of the container into the cistern.
- 4 A dispensing unit as claimed in Claim 3 including a resilient biasing means acting on the shuttle so that with the container substantially empty the biasing means acts to restore the shuttle from the second position to the first and to maintain it in the first position.
- 5 A dispensing device as hereinbefore described with reference to and as illustrated in Figures 1 to 5 of the accompanying drawings.